

Remarks

Claims 1-22 are currently pending and stand rejected. Claims 1, 2, 5, 6, 7, 9, 12, 14, 19, and 20 have been amended. Applicants assert that the claims are now in condition for allowance as set forth more fully below.

Interview Summary

The undersigned participated in a telephone interview with the Examiner on July 28, 2004. During the interview, deficiencies in the Gebauer and Hunter references were discussed. Namely, it was discussed that Gebauer utilizes only conventional variables necessary in performing tasks within a web server to provide services to a client as opposed to storing transaction type-attribute strings that include a transaction code, an attribute, and that has an associated action value. Furthermore, it was discussed how Hunter masks the received IP address that will be used to search entries of a forwarding table as opposed to storing IP address entries in the forwarding table with masks. Further, it was discussed how the claims would be amended to more clearly recite the subject matter of the present invention.

112 Rejections

The Office Action has rejected claims 1, 7, and 14 under 35 USC 112 as failing to set forth the subject matter which applicants regard as their invention. The Office Action notes that there is discussion of transaction codes and managing transaction messages in papers submitted by the Applicants but that these items are not present in the claims. The Office Action further states that the claims fail to define the specific type and nature of transaction codes and their associated attributes and the specific type and nature of transaction messages. Additionally, the Office Action states that it is unclear as to: the relationship of the management file containing a reduced number of transaction type-attribute strings and a fully populated management file, which process determines what action to take, how action value defines the action and what action, and what and which action values are defining what action the process uses.

Applicants have hereby amended claims 1, 7, and 14 as well as claim 20 to more clearly recite the subject matter regarded as the present invention. Claims 1, 7, and 14

now recite that a management file, or table in claim 14, contains a plurality of transaction type-attribute strings with multiple transaction type-attribute strings of the plurality comprising a transaction type identified by a transaction code having one or more characters masked so as to represent multiple transaction types, the multiple strings further comprising an attribute and an associated action value representing an action to be taken by the receiving computer system for the attribute, wherein the management file contains a reduced number of transaction type attribute strings with respect to a management file not containing transaction type attribute strings with the transaction type having one or more characters masked.

Applicants assert that these recitations now more clearly indicate the subject matter of the present invention by indicating that the transaction type is identified by a transaction code forming part of the transaction type-attribute strings, that a request message is received that has a corresponding transaction type and attribute which has a particular action value association with it. Further, the management file of claims 1 and 7 and the table of claim 14 has a reduced number of strings relative to a management file or table that does not have transaction type-attribute strings with masked values since one transaction type without masked characters cannot represent multiple transaction types.

Claim 1 further recites a process implemented by the receiving computer system that determines what action to take in response to the received request by comparing one of the corresponding transaction types with the transaction type of the plurality of transaction type-attribute strings of the management file to find a transaction type-attribute string that matches both the transaction type and one of the attributes corresponding to the received request, and by obtaining the action value associated with the transaction type-attribute string that has been the found. Thus, Applicants further assert that these recitations more clearly indicate the subject matter of the invention of claim 1.

Applicants respectfully request that the 112 rejections be withdrawn in view of these amendments.

103 Rejections

Claims 1-22 stand rejected under 35 USC 103(a) as being unpatentable over Gebauer (US Pat 6,446,117) in view of Hunter (US Pat 6,223,172). Applicants respectfully traverse these rejections.

Claims 1- 6

The Office Action has rejected claim 1 by stating that Gebauer teaches storage of variables, processing of the variables, and determining an output. The Office Action equates the variables of Gebauer to the transaction type-attribute strings of the present invention. The Office Action states that Gebauer fails to teach applying masks to the variables but that Hunter teaches a mask format and teaches applying the masks to IP addresses and how the IP addresses are used for searching for a longest match for the address by comparing a portion of the address indicated by a mask and progressively shortening the mask until a matching entry is located. The Office Action further states that it would have been obvious to combine Hunter with Gebauer to thereby render claim 1 unpatentable.

Amended claim 1 recites a receiving computer system that receives a request message from a first computer system, wherein the request message corresponds to a response having one or more transaction types and having one more attributes for each of the one or more identified transaction types. Claim 1 further recites a management file accessible by the receiving computer system and containing a plurality of transaction type-attribute strings with multiple transaction type-attribute strings of the plurality comprising a transaction type identified by a transaction code having one or more characters masked so as to represent multiple transaction types, the multiple strings further comprising an attribute and an associated action value representing an action to be taken by the receiving computer system for the attribute, wherein the management file contains a reduced number of transaction type attribute strings with respect to a management file not containing transaction type attribute strings with the transaction code having one or more characters masked.

Neither Gebauer nor Hunter teaches transaction type-attribute strings stored in a management file. The variables taught by Gebauer are not transaction type-attribute

strings but are merely conventional variables used in a computer process, such as those performed by a web server on behalf of a client device. Transaction type-attribute strings as recited in claim 1 are strings that contain a transaction type, represented by a transaction code, and a corresponding attribute, and these strings are also associated with an action value. Accordingly, when a request is received, the corresponding transaction type, which is identified by the transaction code, and attributes for that transaction type can be found in matching strings of the management file to then find the associated action value. Hunter stores IP addresses that are relevant to the forwarding of data packets in a table, but there is no storage of a transaction type and an attribute as a string that is associated with an action value.

Furthermore, neither Gebauer nor Hunter teaches that such transaction type-attribute strings have transaction codes with one or more characters masked. Hunter does disclose utilizing masking of an IP address in order to expedite the process of finding a matching IP address in a forwarding table by reducing the number of bits that need to be considered to find a match. However, the masking of Hunter is applied to the received IP address that is to be looked up within the forwarding table, as opposed to storing IP addresses within the forwarding table that have one or more characters masked. Hunter is concerned with reducing the time to search a lengthy table as opposed to reducing the size of the table itself. The forwarding table of Hunter does not have a reduced size since it must still contain all of the forwarding addresses relevant to a particular router. Claim 1 recites a management file that has a reduced size relative to a management file that does not have transaction types that are masked. Thus, claim 1 is allowable over the cited combination for at least these reasons.

Additionally, there is no motivation to combine Gebauer with Hunter. Gebauer involves utilizing stored variables at a network endpoint, i.e. a web server, to perform tasks for a client device whereas Hunter involves utilizing masking of IP addresses to expedite forwarding of data packets within networks by a mid-stream device, i.e. a router, bridge, or switch. One looking to determine and modify processes used at endpoints within a network, such as the web servers of Gebauer, would not be motivated to look toward references that involve application of a non-endpoint device, such as the

forwarding routers, bridges, and switches of Hunter. Thus, claim 1 is allowable over the cited combination for these additional reasons.

Dependent claims 2-6 depend from an allowable claim 1 and are also allowable for at least the same reasons. Furthermore, one or more of claims 2-6 recite additional features that are also patentable over the cited combination.

Claims 7-22

The Office Action has applied the same combination of references to independent claims 7, 14, and 20. However, claims 7, 14, and 20 have similar recitations to those noted above for claim 1. Accordingly, claims 7, 14, and 20 are allowable over the cited references for the similar reasons as those for claim 1.

Dependent claims 8-13, 15-19, 21, and 22 depend from allowable claims 7, 14, and 20, respectively, and are also allowable for at least the same reasons. Furthermore, one or more of claims 8-13, 15-19, 21, and 22 recite additional features that are also patentable over the cited combination.

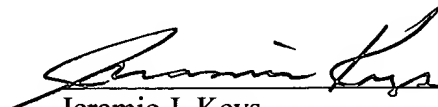
Conclusion

Applicants assert that the application including claims 1-22 is now in condition for allowance. Applicants request reconsideration in view of the amendments and remarks above and further request that a Notice of Allowability be provided. Should the Examiner have any questions, please contact the undersigned.

No fees are believed due other than a request for continued examination. However, please charge any additional fees or credit any overpayment to Deposit Account No. 50-3025.

Respectfully submitted,

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